



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

January 14, 2015

Dr. William R. Berti
Manager of Regulatory Affairs
Nichino America, Inc.
4550 New Linden Hill Road, Suite 501
Wilmington, DE 19808

Subject: Label Notification per PRN 98-10 – Alternate Brand Name, Update Hotline
Number and a Number of Minor Label Changes
Product Name: Akari 5SC Miticide/Insecticide
EPA Registration Number: 71711-4
Application Date: December 19, 2014
Decision Number: 498730

Dear Dr. Berti:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, please contact Rosalind Gross at 703 308-7368 or via email at gross.rosalind@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to be "Kable Davis", enclosed in a large, hand-drawn oval.

Kable Davis, Product Manager 3
Invertebrate and Vertebrate Branch 1
Registration Division (7505P)
Office of Pesticide Programs

GROUP 21A INSECTICIDE

Akari® 5SC Miticide / Insecticide

Active Ingredient:

Fenpyroximate: *Tert*-butyl(E)- α -(1,3-dimethyl-5-phenoxy)pyrazol-4-ylmethyleneaminoxy)-p-toluate.....**5.0%**

Other Ingredients:.....**95.0%**

Total.....**100.0%**

(Contains 0.42 lb. active ingredient per U.S. gallon)

NOTIFICATION

EPA Reg. No. 71711-4

EPA Est. No. 71711-4

Marketing Brands

Miteus™ miticide/insecticide; FujiMite® SC miticide/insecticide

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

01/14/2015

**KEEP OUT OF REACH OF CHILDREN
WARNING - AVISO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
If in eyes	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
If on skin or clothing	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact <u>For additional information on this pesticide product, including human health concerns and medical emergencies, you may call 1-800-348-5832 for emergency medical treatment information.</u> In case of fire or spills, information may be obtained by calling 1-800-424-9300.	
NOTE TO PHYSICIAN: There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.	

NET CONTENTS: _____

Formulated and Packaged in _____ U.S.A. Produced for

NICHINO AMERICA, INC.
4550 New Linden Hill Road
Wilmington, DE 19808
1-888-740-7700

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals
WARNING - AVISO

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles or face shield). Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Harmful if inhaled. Avoid breathing spray mist. Remove contaminated clothing and wash clothing before reuse.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Protective eyewear
- Chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber and/or ~~V~~Viton®)
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

- Do not eat, drink, smoke, or chew gum or tobacco while handling this product and until hands and face are thoroughly washed with soap and water.
- Do not use the toilet before thoroughly washing hands.
- If this product penetrated through your clothing or personal protective equipment, stop handling this product immediately, remove the clothing and equipment, wash your body thoroughly, and put on clean clothing and equipment before resuming the handling activity.
- After handling this product, remove personal protective equipment immediately. Wash the outside of gloves before taking them off. Shower or wash thoroughly and change into clean clothing as soon as possible.
- Discard clothing and personal protective equipment that cannot be reused, including clothing and other absorbent materials that have been drenched or thoroughly contaminated with this product's concentrate. Otherwise, wash clothing and personal protective equipment (including both the inside and outside of gloves) before each day of reuse according to manufacturer's directions or, if no such directions, in detergent and hot water. Keep and wash them separately from other laundry.

ENVIRONMENTAL HAZARDS

This pesticide is very highly toxic to fish and aquatic invertebrates. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinsate.

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having medium to high potential for reaching both surface water and aquatic sediment via runoff for several weeks after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of this chemical from runoff water and sediment. Runoff of this product will be reduced by avoiding applications

when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

ENDANGERED SPECIES RESTRICTIONS

This product may pose a hazard to endangered aquatic species. Follow all use directions.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

Minimum Honey Bee Toxicity

Fenpyroximate is practically nontoxic to bees and wasps when fenpyroximate is applied to listed crops according to the label directions.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or Tribe, consult the agency in your state responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Protective eyewear
- Chemical-resistant gloves such as barrier laminate or **v**iton
- Shoes plus socks

NONAGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, or greenhouses. For other uses, including interiorscapes and other nonagricultural uses, do not enter treated areas without protective clothing until sprays have dried.

GENERAL INFORMATION

[Akari® 5SC Food Crop Use (non-greenhouse)]

AKARI® 5SC miticide/insecticide is used for the control of leafhoppers, mealybugs, mites, psylla, psyllids, and whiteflies. **AKARI 5SC miticide/insecticide** stops mite feeding immediately after application.

AKARI 5SC miticide/insecticide controls all motile stages of mites by inhibiting cellular respiration in the mitochondrion of cells which results in rapid cessation of all biological activities including feeding and reproduction. Mortality of mites can be observed within **3- to 7** days after intoxication.

AKARI 5SC miticide/insecticide works primarily through contact action, **so thorough spray coverage is necessary**. Mix with sufficient water and apply as a foliar spray to obtain uniform coverage. Dense foliage or excessive growth will often prevent adequate coverage; adjust spray volumes accordingly. Treat plants when pests are immature or at a susceptible stage and populations are building, before crop damage occurs.

Target Species	
Apple rust mite (suppression only)	Pacific spider mite
Asian citrus psyllid	Six spotted mite
Banks grass mite	Pear psylla
Broad mite	Pear rust mite
Carmine mite	Pecan leaf scorch mite
Citrus bud mite	Potato leafhopper
Citricola scale	Tomato (Potato) psyllid
Citrus leafminer (suppression only)	Powdery Mildew (suppression only)
Citrus red mite	Strawberry spider mite
Citrus rust mite	Texas citrus mite
Citrus thrips (suppression only)	Tomato russet mite
Cyclamen mite	Two-spotted spider mite
European red mite	Variegated leafhopper
Glassy-winged sharpshooter (suppression only)	White apple leafhopper
Grape leafhopper	Whiteflies
McDaniel mite	Willamette spider mite
Mealybug species	Persea mite
Mint bud mite	Avocado Brown mite

APPLICATION DIRECTIONS

- Applications should be made immediately after the spray solution is prepared.
- Apply with properly calibrated spray equipment.
- Apply by ground or air using the recommended water spray volume found in the Directions for Use section of this label.
- For aerial equipment, use larger droplet size (greater than 200 microns).
- Thorough spray coverage is essential for mite and insect control.
- For best results, apply when pest populations are beginning to build, before reaching economic thresholds. Consult your local agricultural advisor or state cooperative extension service for further information.

USE OF ADJUVANTS

When thorough coverage is a concern, it is recommended that a spray adjuvant be used to maximize uniformity of coverage and performance of Akari 5SC miticide/insecticide. Use a non-ionic activator type wetting, spreading or penetrating adjuvant or horticultural spray oil adjuvant. Do not use a dormant oil, or binder or sticker-type adjuvant. Non-ionic adjuvants (NIS) should contain at least 75% surfactant. Crop oil concentrates (COC), methylated seed or vegetable oils (MSO), organosilicone products (OS), or blends of these adjuvants should contain at least 15% emulsifier/surfactant. Check compatibility of any adjuvant used with Akari 5SC miticide/insecticide before using. Follow the Directions for Use on each adjuvant product label for rates of use and use restrictions.

APPLICATION RESTRICTIONS

- ~~For all other use patterns, do not apply within 75 feet of fish-bearing waters.~~
- Aerial use Use by air on citrus is limited to the states of Florida and Texas.
- For aerial use on citrus in Florida, do not apply within 150 feet of all aquatic areas.
- [For all other uses patterns,] do not apply within 75 feet of fish-bearing waters.
- Do not use products with the same mode of action in consecutive applications.

- Do not plant rotational crops other than those listed on this label for 30 days following the last application of this product.
- Do not apply through any type of irrigation system.
- Miteus and FujiMite SC brands: Do not use in greenhouse structures.
- Do not apply by Alternate Row Middle (ARM) spray method.

RESISTANCE MANAGEMENT

Repeated use of the same chemistry has been shown to result in the buildup of resistant strains of mites or other insects. Do not use **AKARI 5SC miticide/insecticide** in successive miticide applications. Rotate the use of **AKARI 5SC miticide/insecticide** with alternate mode of action insecticides:

- Miticides must be rotated with alternate products for resistance management.
- **Do not use products with the same mode of action [METI-2 inhibitor/IRAC Group 21A] in consecutive applications.**

Consult your local crop advisor for the most appropriate alternative products. Resistance management strategies recommend that you DO NOT apply rates lower than recommended on the label.

MIXING DIRECTIONS

AKARI 5SC Miticide/Insecticide Alone: Shake well before using. Begin with clean equipment. Fill spray tank with $\frac{3}{4}$ of the amount of water needed for the intended application and then turn on agitation. Pour recommended specified amount of product on the surface of the water in the spray tank. Add the balance of the water to the spray tank with agitation running. Keep agitation running during filling and spraying operations. If spraying must be stopped before emptying the sprayer, resume agitation before spraying the remainder of the load. Mix only as much spray solution as can be sprayed within four hours. Storage and use of the previous day's spray mix may result in reduced activity.

~~**AKARI 5SC Miticide/Insecticide Tank Mixtures:** Shake well before using. Read and follow all label directions for each tank mix product prior to any tank mixing with **AKARI 5SC miticide/insecticide**. This product can be mixed with other registered pesticides for use on labeled crops or sites, in accordance with the most restrictive use directions and precautions. Follow all use directions as listed above under **AKARI 5SC Miticide/Insecticide Alone** with the following exception: after the **AKARI 5SC miticide/insecticide** is thoroughly mixed and the tank is $\frac{3}{4}$ full, add the recommended amount of wettable powder, soluble powder, flowable, emulsifiable concentrate, or soluble liquid product, **while maintaining agitation**. Then continue adding water to the tank to achieve the desired level, while maintaining agitation.~~

Begin with clean equipment. Fill spray tank with $\frac{3}{4}$ of the amount of water needed for the intended application and turn on agitation. If using a buffering agent, add after filling the tank with $\frac{3}{4}$ amount of water. Add the recommended amount of tankmix products in the following order while maintaining agitation:

- 1) products in water-soluble packets
- 2) wettable powders
- 3) water-dispersible granulars and/or soluble powders
- 4) flowable liquids (including Akari 5SC miticide/insecticide)
- 5) emulsifiable concentrates
- 6) adjuvants and/or oils
- 7) remaining amount of water to achieve the desired level

Always follow the labeled mixing instructions of any partner products. Keep agitation running during filling and spraying operations. If spraying must be stopped before emptying the sprayer, resume agitation before spraying the remainder of the load. Storage and use of the previous day's spray mix may result in reduced activity.

If you have no experience with the combination you are considering, you should conduct a test to determine physical compatibility. To determine physical compatibility, add the recommended proportions of each chemical with the same proportion of water, as will be present in the chemical supply tank, into a

suitable container, mix thoroughly, and allow to stand for five minutes. If the combination remains mixed, or can be readily re-mixed, the mixture is considered physically compatible.

SPRAY DRIFT REDUCTION MANAGEMENT

Avoid spray drift to all other crops and nontarget areas. Do not apply when weather conditions may cause drift. Do not allow this product to drift onto nontarget areas. Drift may result in illegal residues or injury to adjacent crops and vegetation. To avoid spray drift, DO NOT apply aerially when wind speed is greater than 10 mph or during periods of temperature inversions. Use of larger droplet size will also reduce spray drift.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

The interaction of equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making decisions.

Droplet size, boom height, and wind speed are the primary factors determining drift. The specific application conditions required for the use of this product are described below.

Controlling Droplet Size – General Techniques

Volume

Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

Pressure

Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. **WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.**

Nozzle Type

Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Controlling Droplet Size – Aircraft

Number of Nozzles

Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.

Nozzle Orientation

Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

Nozzle Type

Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Height and Length – Ground and Aircraft

Boom Height (ground): Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

Boom Height (aircraft): Application more than 10 feet above the canopy increases the potential for spray drift.

Boom Length (aircraft): The minimum boom length should not exceed $\frac{3}{4}$ of the wing length; using shorter booms decreases drift potential. For helicopters, the minimum boom length should not exceed $\frac{9}{10}$ of the rotary blade to prevent droplets from entering the rotor vortices.

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **AVOID GUSTY OR WINDLESS CONDITIONS.** **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. This cloud can move in unpredictable directions due to the light and variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

Shielded Sprayers

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with the uniform deposition of the product

Air Assisted (Air Blast) Field Crop Sprayers

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

Air Assisted (Air Blast) Tree And Vine Sprayers

Air assisted tree and vine sprayers carry droplets into the canopy of trees and vines via a radially or laterally directed air stream. These sprayers are not suitable for applying herbicides. In addition to the general drift management practices already described, the following specific practices will further reduce the potential for drift:

- Adjust the deflectors and aiming devices so that spray is only directed into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.

- Use only enough air volume to penetrate the canopy and provide good coverage.
- Do not allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

GENERAL INFORMATION

[Akari 5SC Indoor Greenhouse and Outdoor Use on Ornamental Crops]

Akari® 5SC is a contact miticide/insecticide used for the control of spider mites and other mite pests in greenhouse cucumbers, greenhouse tomatoes and greenhouse peppers, all ornamental crops including flowering and foliage crops, nursery crops, nonbearing fruit trees and vines, and Christmas trees. This product should be used in a program with other products to provide season long protection. Miticides must be rotated with alternate products for resistance management. Do not use products with the same mode of action (METI-2 inhibitor/IRAC Group 21A) in consecutive applications. Apply as a spray as set forth in the APPLICATION DIRECTIONS section of this label, using sufficient water volume to obtain thorough coverage of plants. Under severe mite conditions, use the maximum rates and the shorter spray interval as specified on the label. Dense foliage or excessive growth will often prevent adequate coverage; adjust spray volumes accordingly.

Akari 5SC miticide/insecticide is a 5% Suspension Concentrate containing 0.42 lb. of fenpyroximate per gallon, which, when mixed with water according to the DIRECTIONS FOR USE, will control mites on ornamentals.

Akari 5SC miticide/insecticide works primarily through contact action, **so good spray coverage is necessary**. Mix with sufficient water and apply as a foliar spray to obtain uniform coverage. Treat plants when pests are immature or at a susceptible stage and populations are building, before crop damage occurs.

Akari 5SC miticide/insecticide stops mite feeding immediately after application. **Akari 5SC miticide/insecticide** provides this stop-feeding action together with a cessation of egg laying, and mites die in 4 to 7 days.

When **Akari 5SC miticide/insecticide** is used to control mites, suppression of mealybugs on the treated crop may be achieved. This product must be used in a program with other products to provide protection against mealybugs.

APPLICATION DIRECTIONS

Akari 5SC miticide/insecticide is recommended for use on greenhouse cucumbers, greenhouse tomatoes, and greenhouse peppers, all ornamental crops including flowering and foliage crops, nursery crops, nonbearing fruit trees and vines, and Christmas trees. These include those crops grown in greenhouses, shade and lathe houses, outdoor nurseries and fields, and in interiorscapes. The use directions of this product are based on the results of product testing programs on a wide variety of ornamental plants. However, it is impossible to test this product on all species and cultivars. The phytotoxicity of **Akari 5SC miticide/insecticide** has been assessed on a wide variety of common ornamental plants with no phytotoxicity. However, not all plant species and their varieties and cultivars have been tested with possible tankmix combinations, sequential pesticide treatments, and adjuvants and surfactants. Local conditions also can influence crop tolerance and may not match those under which testing has been conducted. Therefore, before using **Akari 5SC miticide/insecticide**, test the product on a sample of the crop to be treated to ensure that a phytotoxic response will not occur as a result of applications. Applications should be made immediately after the spray solution is prepared. Thorough spray coverage is essential for mite control.

Apply **Akari 5SC miticide/insecticide** using a properly calibrated sprayer in a minimum of 100 gallons of water per acre to ensure uniform, adequate coverage. Be sure to apply in sufficient water to obtain thorough coverage of all plant parts.

- Apply with high or low volume spray equipment to greenhouse cucumbers, greenhouse tomatoes, and greenhouse peppers
- Apply with high volume, low volume, or ultra low volume (thermal and non-thermal foggers, misters, etc.) spray equipment to ornamental trees, vines, shrubs, foliage, and flowering plants

Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information. Except for use on greenhouse cucumbers, greenhouse tomatoes, and greenhouse peppers, a wetting agent or other spray adjuvant, approved for use on the crop, may be added to spray solutions according to the manufacturer's use instructions to achieve optimum mite control.

For best results, apply when pest populations are beginning to build, before reaching economic thresholds. Consult your local agricultural advisor, state cooperative extension service, or regional Nichino America representative for further information.

USE OF ADJUVANTS

When thorough coverage is a concern, it is recommended that a spray adjuvant be used to maximize uniformity of coverage and performance of Akari 5SC miticide/insecticide. Use a non-ionic activator type wetting, spreading or penetrating adjuvant or horticultural spray oil adjuvant. Do not use a dormant oil, or binder or sticker-type adjuvant. Non-ionic adjuvants (NIS) should contain at least 75% surfactant. Crop oil concentrates (COC), methylated seed or vegetable oils (MSO), organosilicone products (OS), or blends of these adjuvants should contain at least 15% emulsifier/surfactant. Check compatibility of any adjuvant used with Akari 5SC miticide/insecticide before using. Follow the Directions for Use on each adjuvant product label for rates of use and use restrictions.

GENERAL USE RESTRICTIONS

- Do not apply within 75 feet of fish-bearing waters.
- In Florida, do not use on bearing or nonbearing commercial fruit trees and vines.
- Do not apply this product through any type of irrigation system.
- Do not use products with the same mode of action in consecutive applications.
- Do not apply this product as a smoke or aerosol.
- Do not apply to fruit trees and vines that will bear harvestable fruit within 12 months unless the crop appears on the label.
- Do not enter the entire enclosed area (treated area) without protective equipment for 12 hours unless one of the following items is completed:
 1. Ten air exchanges.
 2. Two hours of system ventilation.
 3. Four hours of ventilation using vents, windows, or other passive ventilation.
 4. Eleven hours with no ventilation followed by 1 hour of mechanical ventilation.
 5. Eleven hours with no ventilation followed by 2 hours of passive ventilation.
 6. All required PPE is worn.

RESISTANCE MANAGEMENT

Repeated use of the same chemistry has been shown to result in the buildup of resistant strains of mites or other insects. Do not use AKARI 5SC miticide/insecticide in successive miticide applications.

Rotate the use of AKARI 5SC miticide/insecticide with alternate mode of action insecticides:

- Miticides must be rotated with alternate products for resistance management.
- Do not use products with the same mode of action [METI-2 inhibitor/IRAC Group 21A] in consecutive applications.

COMPATIBILITY OF SPRAY MIXTURES

Akari 5SC miticide/insecticide is believed to be compatible with most commonly used fungicides, insecticides, micronutrients, growth regulators, and spray adjuvants. Consult specific product labels for

additional information. It is always a good idea to conduct a tankmix compatibility test when you plan to mix **Akari 5SC miticide/insecticide** with other products.

To determine the physical compatibility of **Akari 5SC miticide/insecticide** with other products, use a jar test. Using a jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add dry formulations first, then flowables, then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank. It is suggested that combinations be used on a small number of plants before treating large areas to check for cultivar sensitivity.

MIXING DIRECTIONS

Shake well before using.

Please read COMPATIBILITY OF SPRAY MIXTURES section prior to any tank mixing with **Akari 5SC miticide/insecticide**. Begin with clean equipment. Prepare only the amount of spray solution needed to treat the target area. Add sufficient clean water to the spray tank for one-half of the mix load. Where possible, start agitation and properly suspend the necessary amount of **Akari 5SC miticide/insecticide** in the tank. Agitate to ensure thorough mixing while adding the remaining required water volume and other products. **Akari 5SC miticide/insecticide** should be properly suspended and diluted prior to the addition of any adjuvant or before spraying. Consult the adjuvant label or manufacturer for crop tolerance and safety information when using **Akari 5SC miticide/insecticide**. Maintain agitation during mixing and application. If agitation is stopped for any reason, the spray solution must be thoroughly remixed prior to further use.

**APPLICATION RATE CHART FOR
AKARI 5SC MITICIDE/INSECTICIDE**

Almonds; And Pistachios (Use Permitted West of the Mississippi River)		
Pest	Rate/Acre	Use Directions
Mites (see Target Species)	1.5 to 4.0 pints <u>(0.079 to 0.210 lb. a.i.)</u>	<p>USE RESTRICTIONS WEST OF THE MISSISSIPPI RIVER</p> <ul style="list-style-type: none"> • Apply by ground using a minimum of 100 gallons of water per acre. • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply more than 8.0 pints <u>(0.42 lb. a.i.)</u> per acre per growing season. • Do not make more than 2 applications per growing season. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 14 days

Avocado; Black Sapote; Canistel; Mamey Sapote; Mango; Papaya; Sapodilla; and Star Apple		
Pest	Rate/Acre	Use Directions
Mites (see Target Species) Whiteflies	1.0 to 2.0 pints <u>(0.053 to 0.105 lb. a.i.)</u>	<p>USE RESTRICTIONS</p> <ul style="list-style-type: none"> • Apply by ground using a minimum of 95 gallons of water per acre or by air using a minimum of 50 gallons of water per acre. • Do not apply more than 4.0 pints <u>(0.210 lb. a.i.)</u> per acre per growing season. • Do not make more than 2 applications per growing season. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 1 day • Do not apply through any type of irrigation system.

Berry, Low-Growing Berry (Crop Subgroup 13-07G)* except cranberries bearberry; bilberry; blueberry, lowbush; cloudberry; lingonberry; muntries; partridgeberry; strawberry; cultivars, varieties, and/or hybrids of these		
Pest	Rate/Acre	Use Directions
Mites (see Target Species) Whiteflies	1.0 to 2.0 pints <u>(0.053 to 0.105 lb. a.i.)</u>	USE RESTRICTIONS <ul style="list-style-type: none"> • Apply by ground application using a minimum of 25 gallons of water per acre. • When using electro-static sprayers, do not apply in less than 10 gallons of water per acre. • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply more than 4.0 pints <u>(0.210 lb. a.i.)</u> per acre per crop cycle. • Do not make more than 2 applications per crop cycle. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 1 day
<p>*NOTE: Temporary pinking of immature green berries may be observed after an Akari 5SC miticide/insecticide application on certain strawberry varieties. This effect is transient and does not affect fruit sizing, color or quality. Avoid puddling of spray solution on plastic mulch as this can potentially result in underside scarring of fruit in direct contact with the plastic.</p>		

Citrus Fruit^S (Crop Group 10-10)		
Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin orange, clementine); tangor; trifoliolate orange; uniq fruit; cultivars, varieties, and/or hybrids of these		
Pest	Rate/Acre	Use Directions
Citrus rust mite	4.0 pints <u>(0.210 lb. a.i.)</u>	USE RESTRICTIONS All geographies: <ul style="list-style-type: none"> • Apply by ground using a minimum of 100 gallons of water per acre. For full size trees, use a minimum of 200 gallons of water per acre. • Apply by air using a minimum of 10 gallons of water per acre. • For aerial use in Florida, do not apply within 150 feet of all aquatic areas. • Do not apply through any type of irrigation system. • Do not apply to citrus nurseries or citrus in greenhouses. • Do not apply more than 4.0 pints <u>(0.210 lb. a.i.)</u> per acre per growing season. • Do not make more than 2 applications per growing season. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 14 days West of the Mississippi River: <ul style="list-style-type: none"> • Do not apply by air except in Texas. • Apply by air in a minimum of 10 gallons of water in Texas. • Do not apply more than 8.0 pints per acre per growing season. • In California, for control of citricola scale, apply by ground using 500 gallons of water.
Citricola scale	3.0 pints <u>(0.158 lb. a.i.)</u>	
Asian citrus psyllid ¹ Citrus thrips (suppression only) Citrus leafminer (suppression only) Leafhoppers Mealybugs Other Mites (see Target Species)	2.0 to 4.0 pints <u>(0.105 to 0.210 lb. a.i.)</u>	
¹ For best results, use for control of adults and nymphs present at time of application when newly expanding foliage flush is present.		

Cotton		
Pest	Rate/Acre	Use Directions
Mites (see Target Species)	Early season¹ (when cotton is less than 10-inches in height) 0.4 to 1.0 pints ² <u>(0.021 to 0.053 lb. a.i.)</u>	USE RESTRICTIONS <ul style="list-style-type: none"> • Apply by ground using a minimum of 10 gallons of water per acre or by air using a minimum of 3 gallons of water per acre. As canopy density increases use of higher water volume will assure better coverage. • Do not apply through any type of irrigation system. • Do not apply more than 2.0 pints <u>(0.105 lb. a.i.)</u> per acre per growing season. • Do not make more than 2 applications per growing season. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 14 days
	Mid-season (when cotton is more than 10-inches in height) 1.0 pint by ground <u>(0.053 lb. a.i.)</u> 1.0 to 2.0 pints by air <u>(0.053 to 0.105 lb. a.i.)</u>	
Whiteflies	2.0 pints <u>(0.105 lb. a.i.)</u>	

¹ For early season use, when cotton is less than 10 inches in height, AKARI 5SC miticide/insecticide may also be applied as a directed spray using ground spray equipment.

² When applying by ground equipment apply as a directed spray for best results.

Cucumbers		
Pest	Rate/Acre	Use Directions
Mites (see Target Species) (Tomato) Potato Psyllid Whiteflies	1.0 to 2.0 pints <u>(0.053 to 0.105 lb. a.i.)</u>	USE RESTRICTIONS <ul style="list-style-type: none"> • Apply by ground using a minimum of 40 gallons of water per acre or by air using a minimum of 10 gallons of water per acre. • Do not apply through any type of irrigation system. • Do not apply more than 4.0 pints <u>(0.210 lb. a.i.)</u> per acre per crop cycle. • Do not make more than 2 applications per crop cycle. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 1 day

Field Corn, Pop Corn, Silage Corn, Seed Corn (limited to States of Arizona, California, Colorado, Hawaii, Kansas, New Mexico, Oklahoma, and Texas)		
Pest	Rate/Acre	Use Directions
Mites (see Target Species)	1.0 to 2.0 pints <u>(0.053 to 0.105 lb. a.i.)</u>	<p>USE RESTRICTIONS</p> <ul style="list-style-type: none"> • Apply by ground application using a minimum of 10 gallons of water per acre or by air using a minimum of 5 gallons of water per acre. • Do not apply through any type of irrigation system. • Do not apply more than 4.0 pints <u>(0.210 lb. a.i.)</u> per acre per crop cycle. • Do not make more than 2 applications per crop cycle. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 14 days for forage, silage, stover, and grain.

Fruiting Vegetables (Crop Group 8-10)		
African eggplant; bush tomato; bell pepper; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; nonbell pepper; roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these		
Pest	Rate/Acre	Use Directions
Mites (see Target Species) (Tomato) Potato Psyllid Whiteflies	2.0 pints <u>(0.105 lb. a.i.)</u>	<p>USE RESTRICTIONS</p> <ul style="list-style-type: none"> • Apply by ground using a minimum of 20 gallons of water per acre or by air using a minimum of 5 gallons of water per acre. • Do not apply through any type of irrigation system. • Do not apply more than 4.0 pints <u>(0.210 lb. a.i.)</u> per acre per crop cycle. • Do not make more than 2 applications per crop cycle. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 1 day

Grapes Raisin, Table, Wine		
Pest	Rate/ Acre	Use Directions
Mites (see Target Species) Mealybugs Powdery Mildew (suppression)	2.0 pints <u>(0.105 lb. a.i.)</u>	USE RESTRICTIONS <ul style="list-style-type: none"> • Apply by ground using a minimum of 50 gallons of water per acre. • When using an electro-static sprayer, less than 50 gallons of water per acre may be used; however, do not use less than 5 gallons of water per acre. • For vines with a heavy canopy, or in high pressure situations, higher water volumes are recommended. If lower water volume amounts are used, tractor speed must be reduced to ensure complete coverage. • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply more than 2.0 pints <u>(0.105 lb. a.i.)</u> per acre per growing season. • Do not make more than 2 applications per growing season. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 14 days
Willamette spider mite	1.5 to 2.0 pints <u>(0.079 to 0.105 lb. a.i.)</u>	
Leafhoppers	1.0 to 2.0 pints ¹ <u>(0.053 to 0.105 lb. a.i.)</u>	
¹ Use higher rate for dense foliage. Best control of leafhoppers is achieved by applications when majority of the population is in an immature development stage.		

Hops*		
Pest	Rate/ Acre	Use Directions
Mites (see Target Species)	2.0 to 3.0 pints <u>(0.105 to 0.158 lb. a.i.)</u>	USE RESTRICTIONS <ul style="list-style-type: none"> • Apply by ground using a minimum of 100 gallons of water per acre. • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply more than 3.0 pints <u>(0.158 lb. a.i.)</u> of product per acre per growing season. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 15 days RECOMMENDATIONS <ul style="list-style-type: none"> • For best results, apply before mite populations exceed 5 mites per leaf.

***NOTE:** Leaf yellowing may occur when AKARI 5SC miticide/ insecticide is combined with spray oil in excess of 1% of the spray volume. If this symptom occurs, it is usually more pronounced on newly expanding leaves. This symptom may occur in plants under stress and is worsened by certain conditions including the following:

- High Temperatures (air temperatures exceeding 90°F at the time of application or within a few days after application).
- Wet soil conditions and high humidity (rainy, misty, or foggy weather within a few days after application).
- Storm damage (including hail and wind).

Melons (Crop Subgroup 9A)		
muskmelon, including hybrids and/or varieties of <i>Cucumis melo</i> (including true cantaloupe, cantaloupe, casaba, Santa Claus melon, crenshaw melon, honeydew melon, honey balls, Persian melon, golden pershaw melon, mango melon, pineapple melon, snake melon); citron melon; and watermelon, including hybrids and/or varieties of (<i>Citrullus</i> spp.)		
Pest	Rate/Acre	Use Directions
Mites (see Target Species) Whiteflies	2.0 pints <u>(0.105 lb. a.i.)</u>	USE RESTRICTIONS <ul style="list-style-type: none"> • Apply by ground application using a minimum of 20 gallons of water per acre. • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply more than 4.0 pints <u>(0.210 lb. a.i.)</u> per acre per crop cycle. • Do not make more than 2 applications per crop cycle. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 3 days

Mint (peppermint, spearmint)		
Pest	Rate/Acre	Use Directions
Mites (see Target Species)	1.0 to 2.0 pints <u>(0.053 to 0.105 lb. a.i.)</u>	USE RESTRICTIONS <ul style="list-style-type: none"> • Apply by ground using a minimum of 25 gallons of water per acre. • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply more than 4.0 pints <u>(0.210 lb. a.i.)</u> per acre per growing season. • Do not make more than 2 applications per growing season. • Allow 7 days between applications. • Pre-harvest Interval (PHI): 1 day

Nonbearing Deciduous Fruit, Tree Nut, And Vines		
Pest	Rate/Acre	Use Directions
Leafhoppers Mealybugs Mites (see Target Species)	1.0 to 2.0 pints <u>(0.053 to 0.105 lb. a.i.)</u>	<p>USE RESTRICTIONS</p> <ul style="list-style-type: none"> • Apply by ground using a minimum of 75 gallons of water per acre. • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply to citrus nurseries or citrus in greenhouses. • Do not apply more than 2.0 pints <u>(0.105 lb. a.i.)</u> per acre per growing season. • Do not make more than 2 applications per growing season. • Allow 14 days between applications. • Do not harvest edible crops for 12 months following application unless the crop is listed on the label.

Nonbearing Deciduous Fruit, Tree Nut, And Vines		
Pest	Rate/Acre	Use Directions
Leafhoppers Mealybugs Mites (see Target Species)	2.0 pints <u>(0.105 lb. a.i.)</u>	<p>USE RESTRICTIONS</p> <ul style="list-style-type: none"> • Apply by ground using a minimum of 75 gallons of water per acre. • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply to citrus nurseries or citrus in greenhouses. • Do not apply more than 2.0 pints <u>(0.105 lb. a.i.)</u> per acre per growing season. • Do not make more than 1 application per growing season. • Do not harvest edible crops for 12 months following application unless the crop is listed on the label.

Ornamentals		
Pest	Rate/Acre	Use Directions
Leafhoppers Mealybugs Mites (see Target Species)	1.0 to 2.0 pints <u>(0.053 to 0.105 lb. a.i.)</u>	<p>USE RESTRICTIONS</p> <ul style="list-style-type: none"> • Apply by ground using a minimum of 50 gallons of water per acre. • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply to citrus nurseries or citrus in greenhouses. • Do not apply more than 2.0 pints <u>(0.105 lb. a.i.)</u> per acre per growing season. • Allow 14 days between applications.

Pome Fruits (Crop Group 11-10)		
Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these		
Pest	Rate/Acre	Use Directions
Leafhoppers Mealybugs Mites (see Target Species)	1.0- to 2.0 pints <u>(0.053 to 0.105 lb. a.i.)</u>	<p>USE RESTRICTIONS</p> <ul style="list-style-type: none"> • Apply by ground using a minimum of 100 gallons of water per acre. • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply by Alternate Row Middle (ARM) spray method. • Do not apply more than 2.0 pints <u>(0.105 lb. a.i.)</u> per acre per growing season. • Do not make more than 2 applications per growing season. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 14 days
Leafhoppers Mealybugs Mites (see Target Species) Pear psylla	2.0 pints <u>(0.105 lb. a.i.)</u>	<p>USE RESTRICTIONS</p> <ul style="list-style-type: none"> • Apply by ground using a minimum of 100 gallons of water per acre. • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply by Alternate Row Middle (ARM) spray method. • Do not apply more than 2.0 pints <u>(0.105 lb. a.i.)</u> per acre per growing season. • Do not make more than 1 application per growing season. • Pre-harvest Interval (PHI): 14 days

Potato		
Tuberous and Corm Vegetables (Crop Subgroup 1C)		
Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, edible; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); ginger; leren; potato; sweet potato; tanier; turmeric; yam bean; yam, true		
Pest	Rate/Acre	Use Directions
Mites Potato psyllid Potato leafhopper	2.0 pints <u>(0.105 lb. a.i.)</u>	USE RESTRICTIONS <ul style="list-style-type: none"> • Apply by ground using a minimum of 20 gallons of water per acre or by air using a minimum of 5 gallons of water per acre. • Do not apply through any type of irrigation system. • Do not apply more than 4.0 pints <u>(0.210 lb. a.i.)</u> per acre per crop cycle. • Do not make more than 2 applications per crop cycle. • Allow 7 days between applications. • Preharvest Interval (PHI): 7 days

Stone Fruits (Crop Group 12-12)		
Apricot; Apricot, Japanese; Capulin; Cherry, black; Cherry, Nanking; Cherry, sweet; Cherry, tart; Jujube, Chinese; Nectarine; Peach; Plum; Plum, American; Plum, beach; Plum, Canada; Plum, cherry; Plum, Chickasaw; Plum, Damson; Plum, Japanese; Plum, Klamath; Plum, prune; Plumcot; Sloe; Cultivars, varieties, and/or hybrids of these		
Pest	Rate/Acre	Use Directions
Mites Leafhoppers	2.0 pints <u>(0.105 lb. a.i.)</u>	USE RESTRICTIONS <ul style="list-style-type: none"> • Apply by ground using a minimum of 80 gallons of water per acre. • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply more than 4.0 pints <u>(0.210 lb. a.i.)</u> per acre per crop cycle. • Do not make more than 2 applications per year. • Allow 14 days between applications. • Preharvest Interval (PHI): 7 days

Snap Beans		
Pest	Rate/Acre	Use Directions
Mites (see Target Species) Whiteflies	2.0 pints <u>(0.105 lb. a.i.)</u>	USE RESTRICTIONS <ul style="list-style-type: none"> • Apply by ground using a minimum of 30 gallons of water per acre or by air using a minimum of 5 gallons of water per acre. • Do not apply through any type of irrigation system. • Do not apply more than 4.0 pints <u>(0.210 lb. a.i.)</u> per acre per crop cycle. • Do not make more than 2 applications per crop cycle. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 1 day

Tree Nuts (Crop Group 14) (Use Permitted West of the Mississippi River) (excluding almonds and pistachios)		
beechnut; Brazil nut; butternut; cashew; chestnut; chinquapin; filbert (hazelnut); hickory nut; macadamia nut; pecan; walnut, black and English		
Pest	Rate/Acre	Use Directions
Mites (see Target Species)	1.5 to 4.0 pints <u>(0.079 to 0.210 lb. a.i.)</u>	USE RESTRICTIONS WEST OF THE MISSISSIPPI RIVER <ul style="list-style-type: none"> • Apply by ground using a minimum of 100 gallons of water per acre. • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply more than 4.0 pints <u>(0.210 lb. a.i.)</u> per acre per growing season. • Do not make more than 2 applications per growing season. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 14 days

Tree Nuts (Crop Group 14) and Pistachio (Use Permitted East of the Mississippi River)		
almond; beechnut; Brazil nut; butternut; cashew; chestnut; chinquapin; filbert (hazelnut); hickory nut; macadamia nut; pecan; pistachio; walnut, black and English		
Pest	Rate/Acre	Use Directions
Mites (see Target Species)	2.0 pints <u>(0.105 lb. a.i.)</u>	USE RESTRICTIONS ALL GEOGRAPHIES <ul style="list-style-type: none"> • Apply by ground using a minimum of 100 gallons of water per acre. • Do not apply by air. • Do not apply through any type of irrigation system. • Do not apply more than 2.0 pints <u>(0.105 lb. a.i.)</u> per acre per growing season. • Do not make more than 1 application per growing season. • Pre-harvest Interval (PHI): 14 days

For front panel of Akari label only:
 FOR USE ON GREENHOUSE AND NURSERY ORNAMENTALS,
 GREENHOUSE CUCUMBERS, GREENHOUSE TOMATOES,
 NONBEARING FRUIT TREES AND VINES, CHRISTMAS TREES, AND
 INTERIOR ORNAMENTAL PLANTINGS AND PLANTSCAPES

Application Rates for Akari 5SC Miticide/Insecticide on Cucumbers Grown in Greenhouses			
Pests	Rate per Acre	Spray Volume	Directions for Use
Spider mites Whitefly (suppression)	1.0 to 2.0 pints <u>(0.053 to 0.105</u> <u>lb. a.i.)</u>	100 gallons	<p>USE RESTRICTIONS</p> <ul style="list-style-type: none"> • Do not use products with the same mode of action in consecutive applications. • Do not apply through any type of irrigation system. • Do not apply in Ultra Low Volume Equipment. • Do not apply more than 2.0 pints (0.1 lb. ai/A) per acre per crop cycle. • Do not make more than 1 application per growing season. • Do not make more than 2 applications per year. • Pre-harvest Interval (PHI): 7 days <p>APPLICATION RECOMMENDATIONS</p> <ul style="list-style-type: none"> • Apply with low or high volume ground equipment only. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information.

Application Rates for Akari 5SC Miticide/Insecticide on Tomatoes and Peppers Grown in Greenhouses			
Pests	Rate per Acre	Spray Volume	Directions for Use
Mites Potato Psyllid Whitefly	1.0 to 2.0 pints <u>(0.053 to 0.105 lb. a.i.)</u>	100 gallons	<p>USE RESTRICTIONS</p> <ul style="list-style-type: none"> • Do not use products with the same mode of action in consecutive applications. • Do not apply through any type of irrigation system. • Do not apply in Ultra Low Volume Equipment. • Do not apply more than 4.0 pints (0.2 lb. s a.i./A) per acre per crop cycle. • Do not make more than 2 applications per crop cycle. • Do not make more than 4 applications per year. • Allow 14 days between applications. • Pre-harvest Interval (PHI): 1 day <p>APPLICATION RECOMMENDATIONS</p> <ul style="list-style-type: none"> • Apply with low or high volume ground equipment only. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information.

Application Rates for Akari 5SC Miticide/Insecticide on Ornamental Trees, Vines, Shrubs, Foliage, and Flowering Plants		
Pest	Application Rate Fl. Oz./100 Gallons	Directions for Use
Spider mites	16.0 to 24.0 fl oz <u>(0.053 to 0.079 lb. a.i.)</u>	<p>USE RESTRICTIONS</p> <ul style="list-style-type: none"> • Do not use products with the same mode of action in consecutive applications. • Do not apply within 75 feet of fish-bearing waters. • Do not apply by air. • Do not make more than 2 applications per year. • Allow 14 days between applications. • Do not apply more than 10 gallons of spray per 1,000 sq. ft. per application. • Do not apply more than 48 fl. oz. <u>(0.158 lb. a.i.)</u> per crop cycle or per growing season, whichever is longer. <p>APPLICATION RECOMMENDATIONS</p> <ul style="list-style-type: none"> • Use the lower rate for low to moderate mite populations. • Use in sufficient volume to obtain uniform plant coverage. 100 gallons of spray will typically cover 20,000 sq. ft. of greenhouse. <p>*For suppression of certain mealybug pests, use in sufficient volume to obtain uniform plant coverage. 100 gallons of spray will typically cover 20,000 sq. ft. of greenhouse.</p>
Tarsonemid mites - Broad mite (<i>Polyphagotarsonemus latus</i>) - Cyclamen mite (<i>Phytonemus pallidus</i>)	24.0 fl oz <u>(0.079 lb. a.i.)</u>	
Eriophyid mites (rust, gall, and bud mites) including but not limited to: - Hemlock rust mite (<i>Nalepella tsugifoliae</i>) - Hackberry rust mite	24.0 fl oz <u>(0.079 lb. a.i.)</u>	
Mealybugs*, including but not limited to: - Citrus mealybug (<i>Planococcus citri</i>) - Long-tailed mealybug (<i>Pseudococcus longispinus</i>)	24.0 fl oz <u>(0.079 lb. a.i.)</u>	

Akari 5SC miticide/insecticide is recommended for use on all ornamental plantings including those listed in the table below.

List of Plant Species Tested for Tolerance to Akari 5SC miticide/insecticide¹

Common Name	Scientific Name
African violet	<i>Saintpaulia ionantha</i>
Azalea	<i>Rhododendron spp.</i>
Chrysanthemum	<i>Chrysanthemum morifolium</i>
Citrus, nonbearing	<i>Citrus spp.</i>
Coleus	<i>Coleus X hybridus</i>
Cotoneaster	<i>Cotoneaster spp.</i>
Dieffenbachia	<i>Dieffenbachia spp.</i>
English ivy	<i>Hedera helix</i>
Fern	<i>Davallia spp.</i>
Ficus	<i>Ficus spp.</i>
Geranium	<i>Geranium spp.</i>
Gerbera	<i>Gerbera spp.</i>
Grape, nonbearing	<i>Vitis spp.</i>
Hackberry	<i>Celtis occidentalis</i>
Hemlock	<i>Tsuga spp.</i>
Holly (e.g. blue, Burford, Japanese)	<i>Ilex spp.</i>
Hypoestes	<i>Hypoestes spp.</i>
Juniper (e.g. creeping, Parsons, upright)	<i>Juniperus spp.</i>
Marigold	<i>Tagetes erecta</i>
New Guinea impatiens	<i>Impatiens linearifolia</i>
Pittosporum	<i>Pittosporum spp.</i>
Poinsettia	<i>Euphorbia pulcherrima</i>
Pyracantha (firethorn, red firethorn)	<i>Pyracantha angustifolia, P. coccinea</i>
Rose, cut and miniature	<i>Rosa spp.</i>
Schefflera	<i>Schefflera spp.</i>
Sweetpotato vine, ornamental	<i>Ipomoea batatas</i>
Zinnia	<i>Zinnia elegans</i>

¹ Local conditions can influence crop tolerance and may not match those under which these species were tested. Before using **Akari 5SC miticide/insecticide**, test the product on a small sample of the crop to be treated.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in a cool, dry place.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product ~~may~~**must** be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

(Nonrefillable container equal to or less than 5 gallons)

Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state or local authorities, by burning. If burned, stay out of smoke.

(Nonrefillable container greater than 5 gallons)

Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Then offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state or local authorities, by burning. If burned, stay out of smoke.

(Refillable container greater than 5 gallons)

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

IMPORTANT: READ BEFORE USE

By using this product, user or buyer accepts the following conditions, warranty, disclaimer of warranties and limitations of liability.

CONDITIONS: The directions for use of this product are believed to be accurate and must be followed carefully. However, because of extreme weather and soil conditions, use methods and other factors beyond the control of Nichino America, Inc. (NAI), it is impossible for NAI to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. To the extent consistent with applicable law, all such risks are assumed by the user or buyer.

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